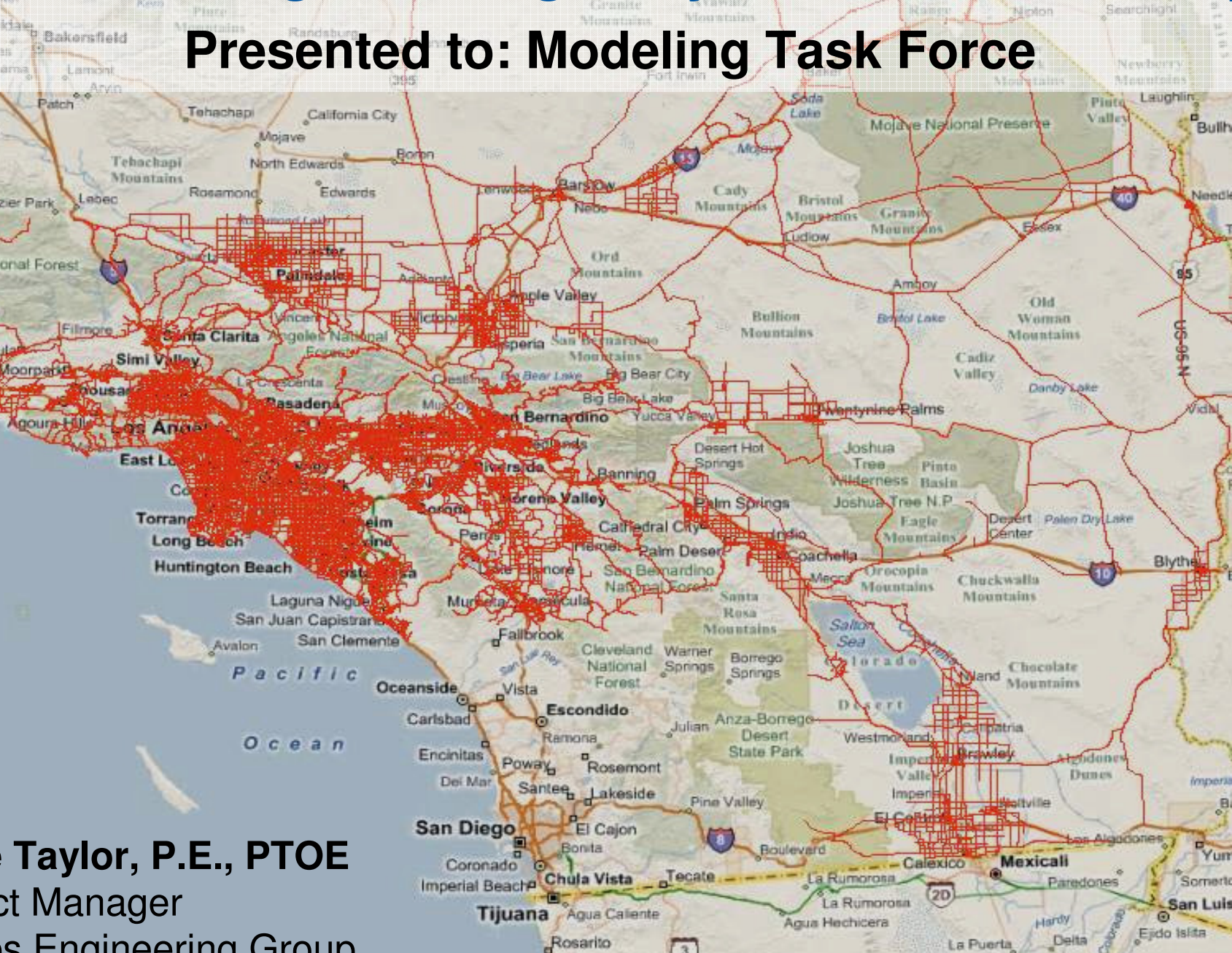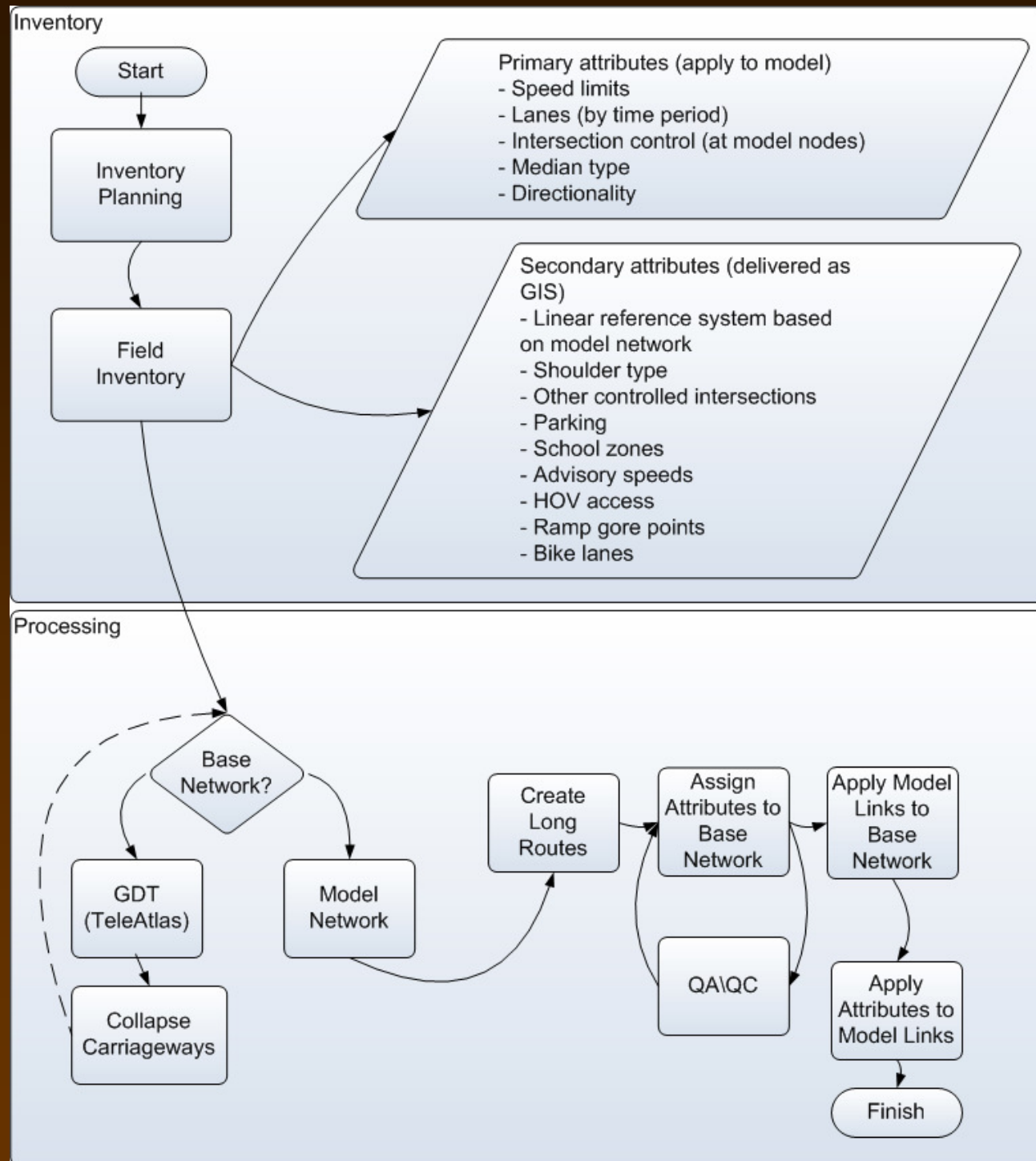# SCAG – Regional Highway Network Inventory
## Presented to: Modeling Task Force

**Steve Taylor, P.E., PTOE**
Project Manager
Jacobs Engineering Group
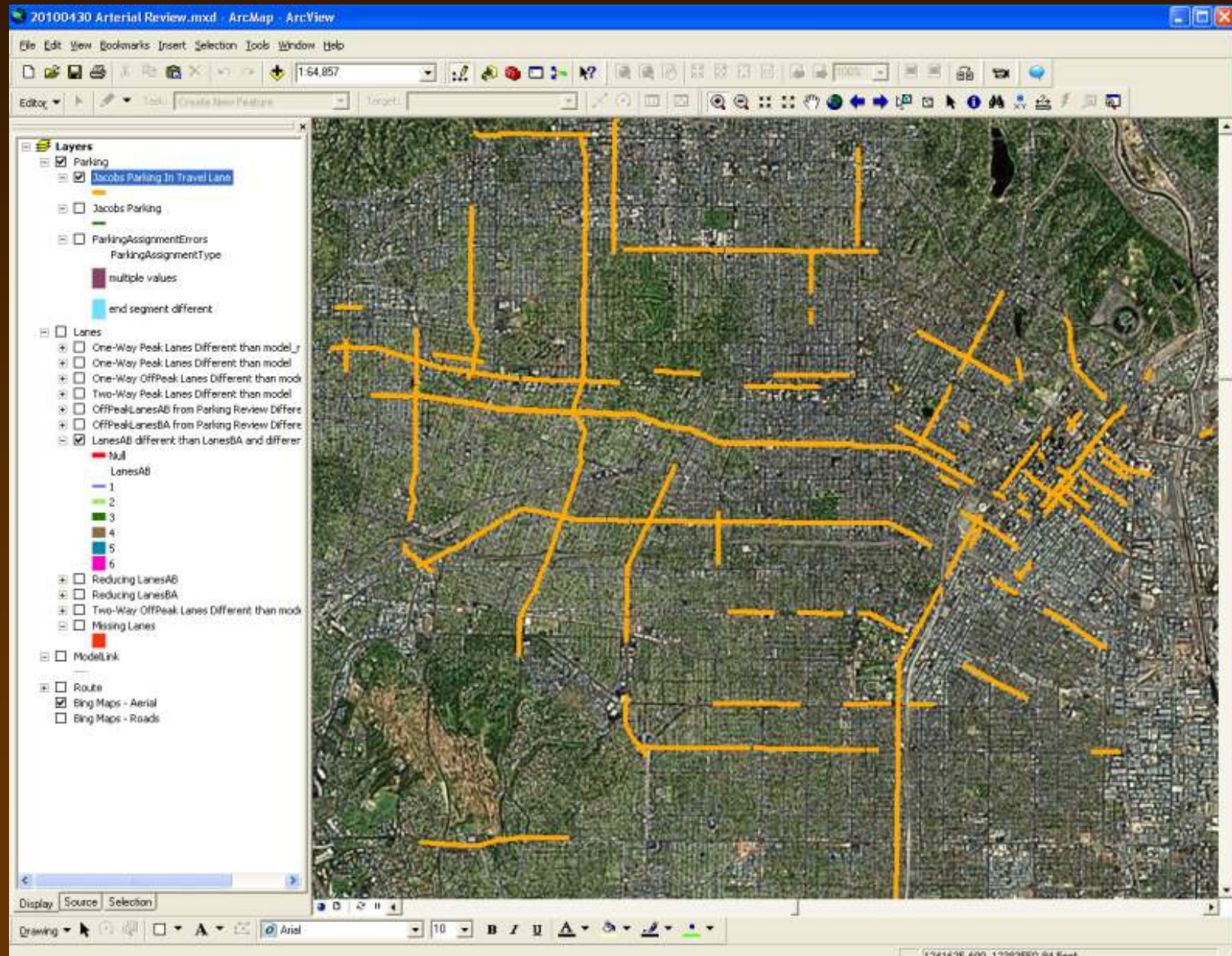**July 28, 2010**

# **Agenda**

- Field Inventory
- Base Network ?
- Linear Reference
  System (LRS)
- QC Process

# Field Inventory (Primary / Secondary)

- Network Included (over 16,000 centerline miles)
  - All Freeways
  - All Arterials
  - All Urban Major Collectors
- Primary Attributes (applied to model)
  - Speed Limits
  - Lanes (by time period)
  - Intersection Control (at model nodes)
  - Median Type
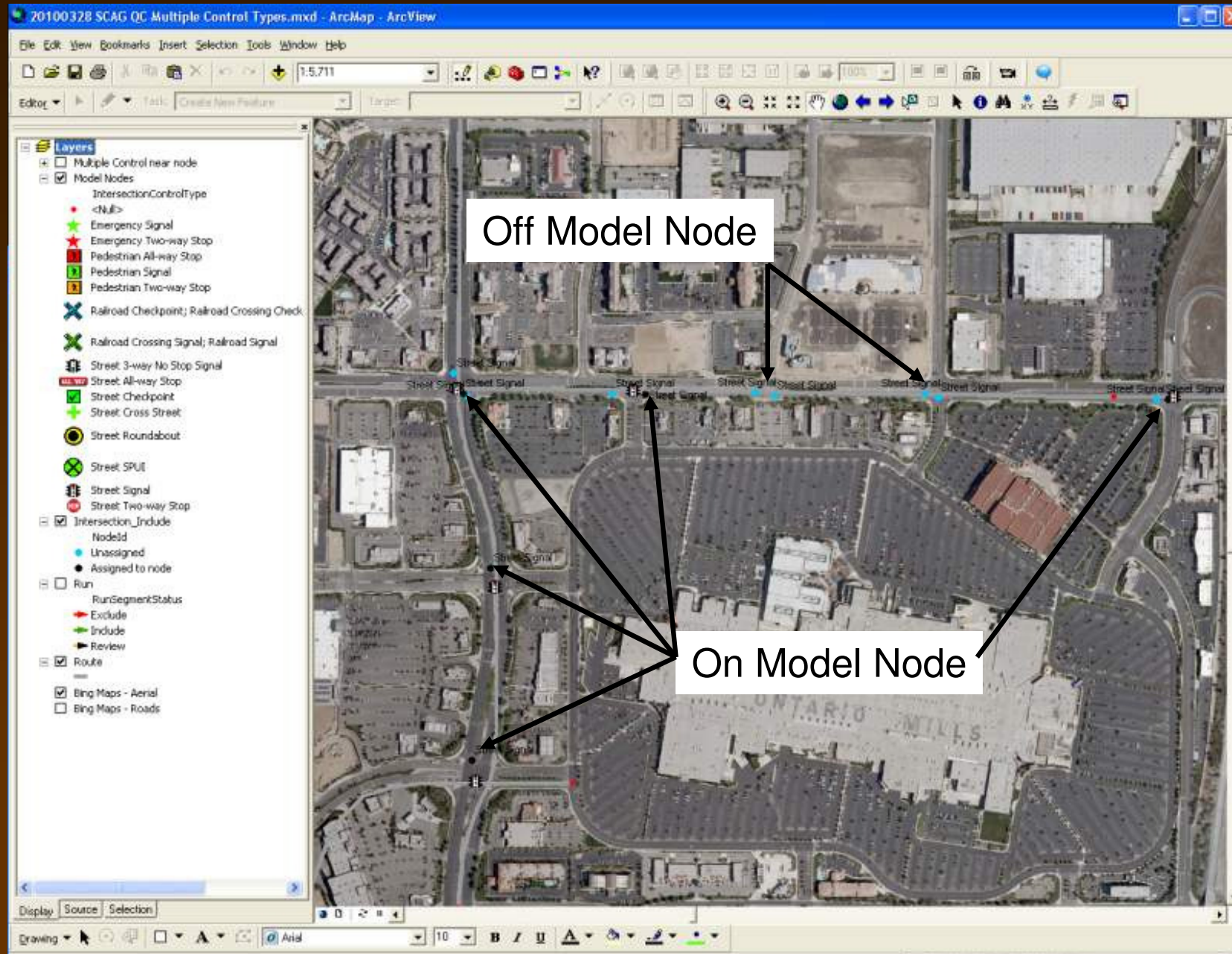  - Directionality (1-way vs. 2-way)

# Field Inventory (Parking in Lanes)

# Field Inventory (Primary / Secondary)

- Secondary Attributes (delivered as GIS)
  - LRS based on model network
  - Shoulder Type
  - Other Controlled Intersections
  - Parking
  - School Zones
  - Advisory Speeds
  - HOV Access
  - Ramp Gore Points
  - Bike Lanes

# Field Inventory (Controlled Intersections – On/Off Model Nodes)

# Field Inventory Tool
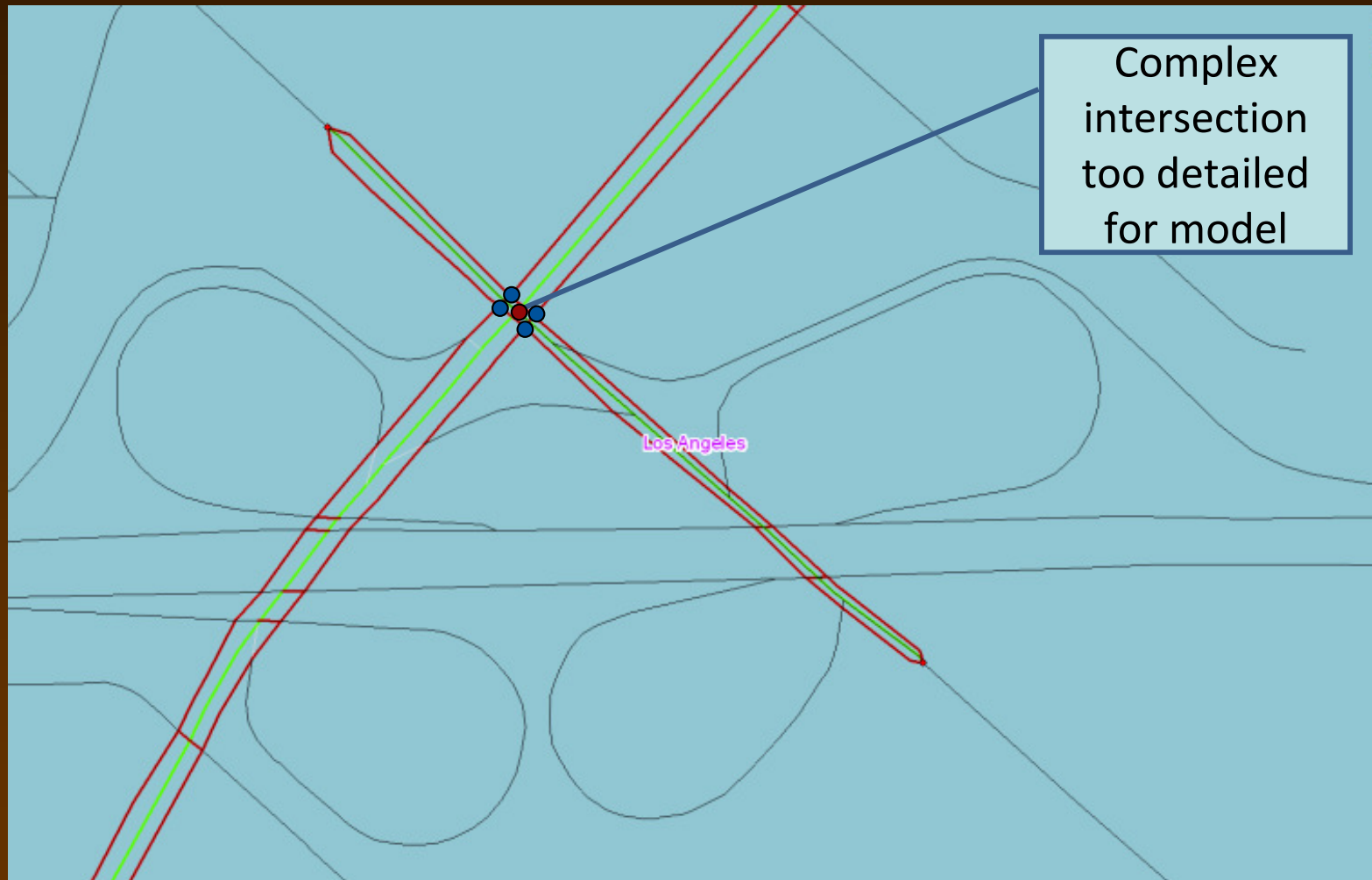
# Base Network

- GDT (TeleAtlas)
- Benefits include annual updates through license agreement
- Challenges
  - includes extra links / nodes not represented in model
  - Need to "collapse carriageways"
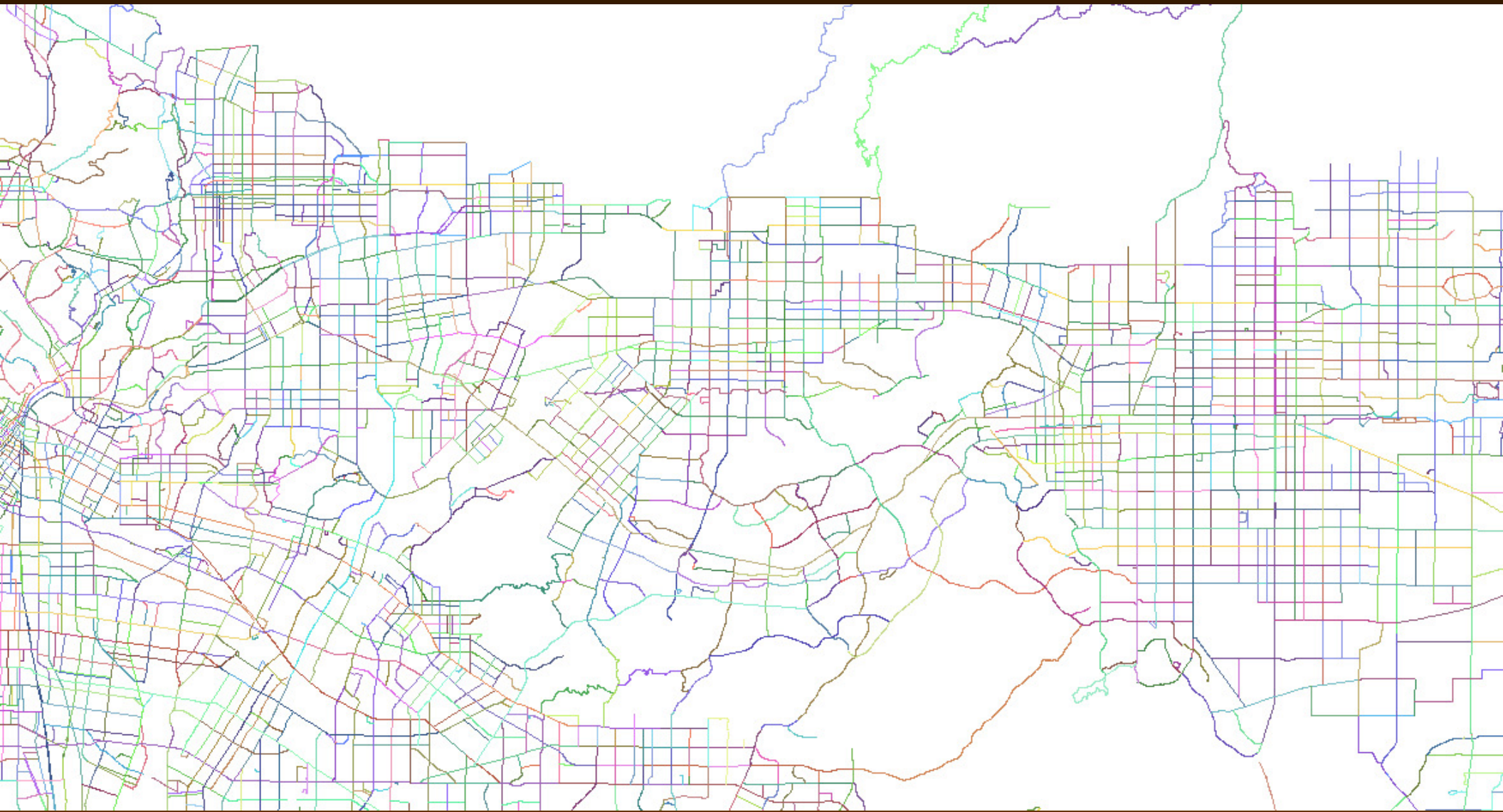    - Current network
    - Each update

# Base Network



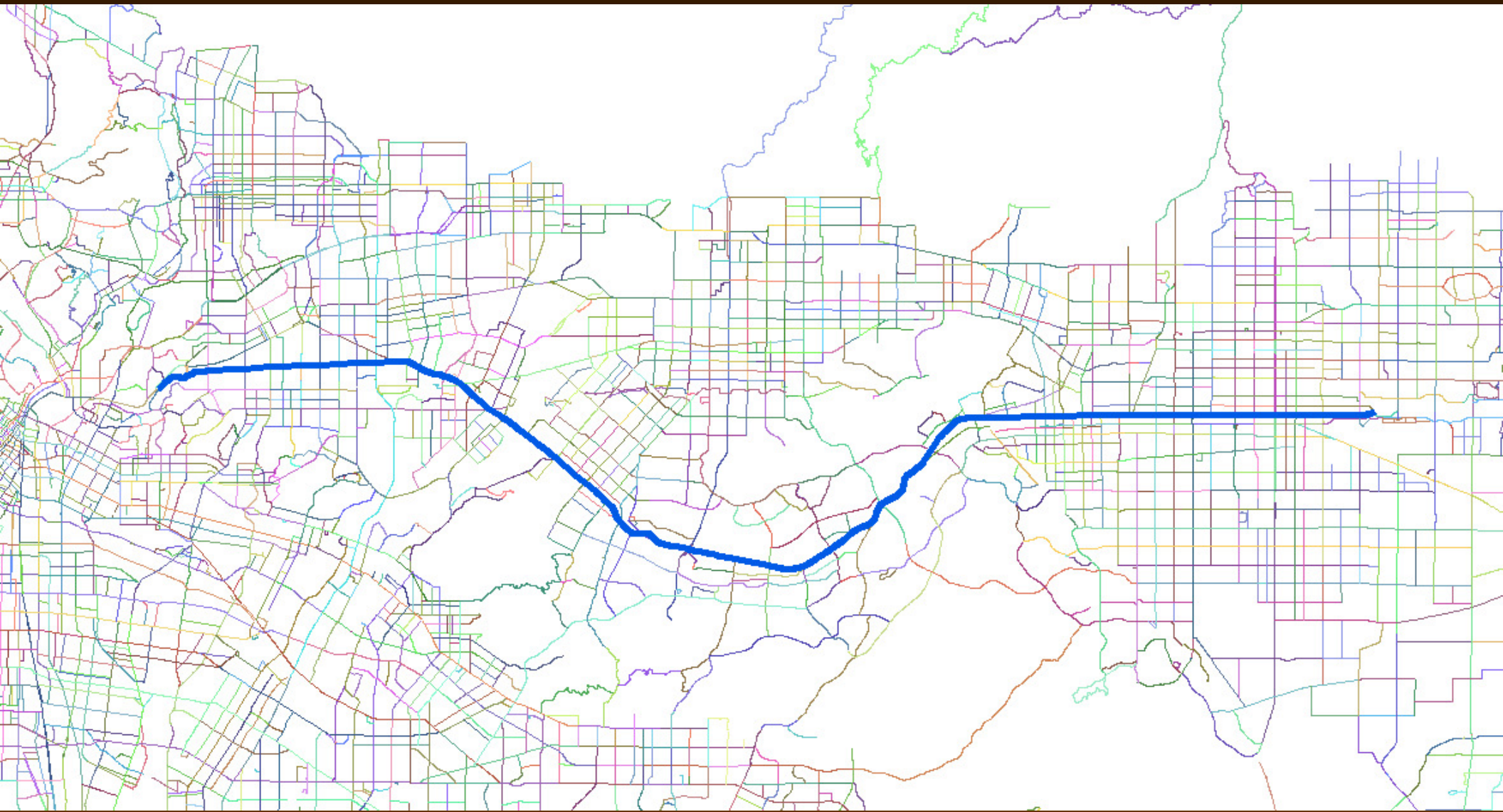Complex intersection too detailed for model

Los Angeles

# Linear Reference System (LRS)

- Model Network
  - Create Long Routes
  - Assign Routes
  - Measure Routes
  - Assign Routes / Measures to Collected Attributes
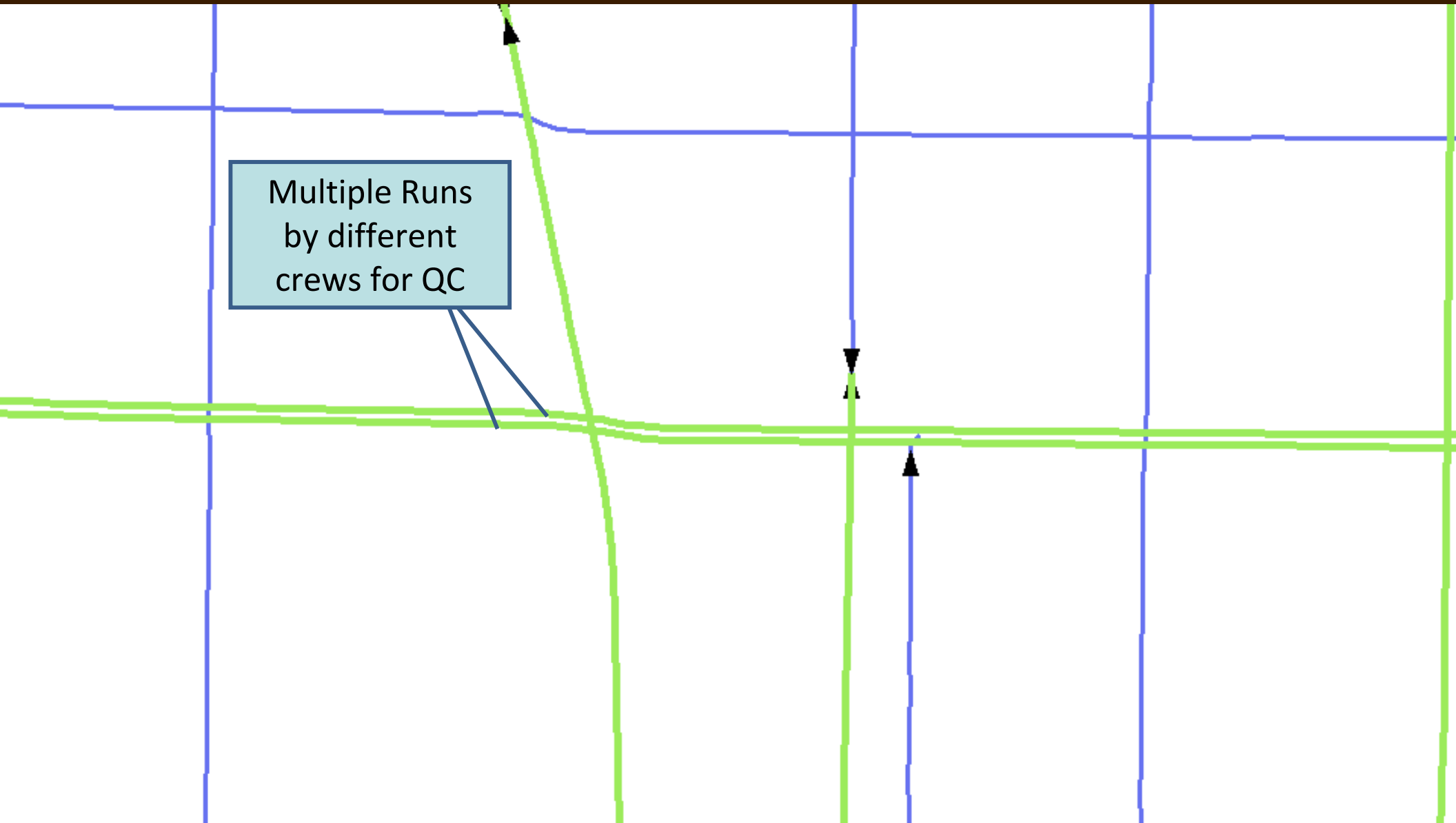  - Apply Collected Attributes to Model Links
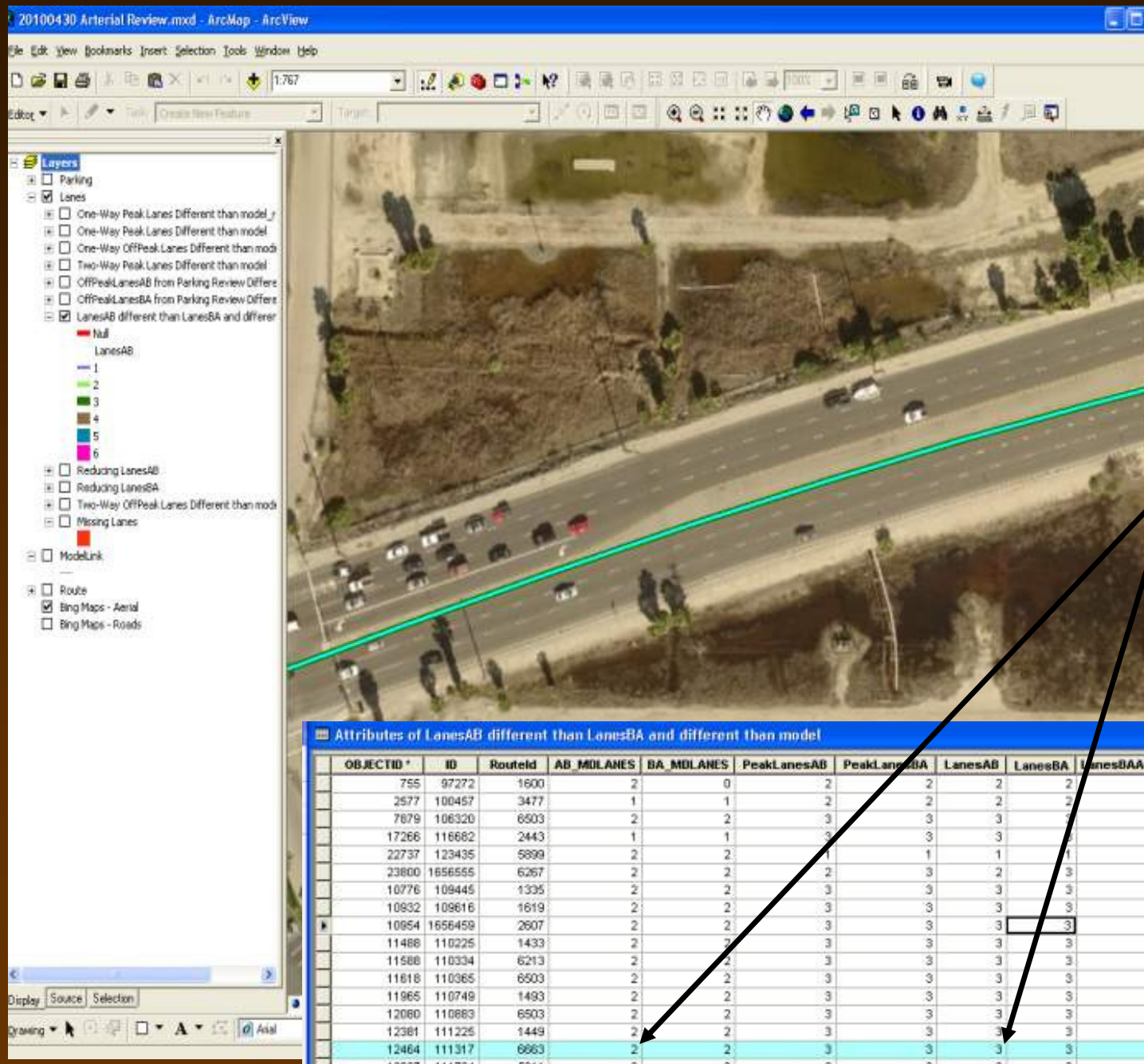
# Linear Reference System (LRS)

# Linear Reference System (LRS)

# QC Process

Multiple Runs by different crews for QC

# QC Process



Model vs Field Inventory
Verify all links that
are different

# Questions ???

**Steve Taylor, P.E., PTOE**
Project Manager
Jacobs Engineering Group
steve.taylor@jacobs.com